

Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2010-09-20
Date of Last Change to Activities: 2012-08-23
Investment Auto Submission Date: 2012-02-27
Date of Last Investment Detail Update: 2012-02-27
Date of Last Exhibit 300A Update: 2012-08-23
Date of Last Revision: 2012-08-23

Agency: 021 - Department of Transportation **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: FAAXX706: NextGen CATMT Workpackage Programs

2. Unique Investment Identifier (Ull): 021-316519385

Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Traffic Flow Management (TFM) system is the automation backbone for the Air Traffic Control System Command Center (ATCSCC) and the nationwide Traffic Management Units that assist the ATCSCC in strategic planning and management of air traffic. TFM hosts the software decision support systems, Collaborative Air Traffic Management Technologies (CATMT) capabilities, which assist in managing and metering air traffic to reduce air traffic delays and make maximum use of system capacity to dynamically balance growing flight demands with NAS capacity. The TFM investment was split into a pre-Next Generation (NextGen) and a NextGen component. The pre-NextGen component, TFM Program (FAAXX705), modernized the infrastructure of the TFM system to support development of more effective planning and management tools provided by CATMT capabilities. The NextGen component, NextGen CATMT Workpackage Programs (FAAXX706), is currently comprised of two work packages containing CATMT capabilities to refine our management of airspace and better collaborate with users. CATMT Work Package 2 (WP2) was approved by the FAA Joint Resources Council (JRC) on 9/26/2008 and CATMT Work Package 3 (WP3) was approved on 1/26/2010. CATMT WP2 and WP3 will implement the following six new enhancements onto the Traffic Flow Management System (TFMS); Arrival Uncertainty Management (AUM) which will automatically use historical data to update current and predicted system demands; Weather Integration which will integrate and display more

accurate and timely weather details onto the primary display used by Traffic Managers and for use in decision support applications; Collaborative Airspace Constraint Resolution (CACR) identifies constrained airspace and provides potential solutions for airborne and pre-departure flights while taking NAS user preference into account; Airborne Reroute Execution (ABRR) provides the ability to electronically send TFM generated airborne reroutes to En Route automation for ATC execution). Collaborative Information Exchange (CIX) which will allow for the automatic entry of system data from the System Wide Information Management (SWIM) versus the current manual entry, and the TFM Remote Site-Re-Engineering (TRS-R) which will modernize multiple unique remote site operating system configurations into a common version. This program has dependencies with the following programs and or systems: AIM, STARS, FTI, ERAM, ERAM D-Position, ATOP, SWIM, TFM, DATACOMM, and NNEW.

2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.

A reduction in funding would impact the overall schedule, potentially result in reduced functionality; result in delay or loss of estimated NAS benefits (\$711M in Airline Direct Operating Cost (ADOC) savings); increase in FAA Operations costs; unable to fulfill RTCA Task Force 5 recommendations for initial electronic negotiation capability for more efficient flight route planning. CATMT will help continue to reduce the traffic delay impacts of severe weather, excess demand, and NAS equipment outages on the aviation community. CATMT will provide more accurate forecasting of system capacity and user demand; improve modeling, evaluation and optimization of traffic management initiatives; improve information dissemination, coordination and execution of traffic flow strategies; minimize and equitably distribute delays across airports and users; and collect and process additional performance data to define metrics and identify trends; reduce the cost of maintaining the TFM remote sites and provide greater ease of use to the traffic management users. CATMT WP2 and WP3 capabilities address the following gaps: 1. Lack of automated data exchange of airborne reroute information between TFM and En Route automation. This limits the number or reroutes processed due to the labor intensive effort which results in unnecessary delay and workload 2. Limited ability for NAS customers to submit their preferences and lack of electronic negotiation capability resulting in possible impacts to their preferred operating plan. Noted also by the RTCA task Force 5 as an issue. 3. Lack of automated support to perform modeling and impact assessment of proposed route options resulting in unnecessary delay 4. Lack of integrated data exchange between service domains limits shared situational awareness; use of that constraint data in decision support tools to reduce uncertainty in predictions. 5. Airlines will have access to NAS constraint data that TFMS will not. 6. Lack of integrated planning tools that predict when departure routes will no longer be blocked by weather resulting in unnecessary ground delay 7. Eliminate the need to manually input airspace status data into the TFM system by automating its incorporation from the System Wide Information Management (SWIM) network.

3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.

– Deployed the 1st of the CATMT capabilities, Arrival Uncertainty Management (AUM), in TFM Release 5/6 in June 2011. AUM includes enhancements to Flight Schedule Monitor

(FSM), an existing tool of the TFM System, to mitigate the demand and capacity uncertainties during Ground Delay Programs. – Continued development and test of the Corridor Integrated Weather System (CIWS) on the TFM Traffic Situation Display (TSD) in TFM Release 5/6 part B. This integrates high confidence 2 hour weather predictions onto the primary traffic picture display used by Traffic Managers and for use as constraint data by decision support tools. – Completed design and initiated development of Release 7, containing the 1st increment of Collaborative Airspace Constraint Resolution (CACR) -Collaborative Trajectory Options Program (CTOP), enabling the negotiation of user preferred routes and alternative trajectories. – These capabilities reduce NAS delay, diversions, cancellations and airborne holding.

4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).

CY 12 • Deploy CIWS onto TFM Traffic Situation Display in TFMS Release 5/6 part B. • Complete development, test and deployment of TFMS Release 7, containing the 1st increment of CACR- CTOP. CTOP supports the response to the RTCA Task Force 5 recommendation for automation to negotiate user-preferred routes and alternative trajectories. • Complete design and initiate detailed design development of TFMS Release 8. TFMS Release 8 contains the Route Availability Planning Tool (RAPT) which locates departure gaps through impending weather and determines if a flight will encounter weather problems on its projected departure route. RAPT is expected to provide \$114.55 million in risk adjusted delay savings through the lifecycle. • Initiate design of TFMS Release 9. • Conduct detailed design and development of TFM Remote Site Re-engineering (TRS-R) Phase 1. TRS-R phase 1 replaces what airlines currently use with the FAA TSD. This allows the airlines to see the same information as the FAA for better situational awareness, collaboration and decision support. This also avoids FAA additional costs to develop on and maintain different, less capable and slower performing software of the military and airline versions of the FAA TSD. BY13 • Complete development, test and deployment of RAPT in TFMS Release 8. • Continue development of TFMS Release 9, which will contain another increment of the CACR capability. • Initiate design of Airborne Reroute Execution (ABRR). ABRR provides the ability to electronically send TFM generated airborne reroutes to En Route automation for ATC execution. • Continue the design and development of TRS-R phase 2, which modernizes the SW infrastructure, backbone, of the TFM decision support tool suite (TFM Remote Site) used by the Traffic Managers in the field. This phase is the first and fundamental step for future mid-term CATMT capabilities as well as the TFM integrated tool suite and integrated displays planned for future CATMT work packages. • Continue CATMT sustainment of deployed capabilities.

5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.

2009-08-20

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

| | PY-1 & Prior | PY 2011 | CY 2012 | BY 2013 |
|--|--------------------|------------|------------|------------|
| Planning Costs: | \$3.0 | \$3.0 | \$0.0 | \$0.0 |
| DME (Excluding Planning) Costs: | \$28.1 | \$32.8 | \$41.5 | \$34.4 |
| DME (Including Planning) Govt. FTEs: | \$1.6 | \$2.6 | \$2.8 | \$2.3 |
| Sub-Total DME (Including Govt. FTE): | \$32.7 | \$38.4 | \$44.3 | \$36.7 |
| O & M Costs: | \$0.0 | \$0.3 | \$0.5 | \$2.5 |
| O & M Govt. FTEs: | \$0.0 | \$0.0 | \$0.0 | \$0.0 |
| Sub-Total O & M Costs (Including Govt. FTE): | 0 | \$0.3 | \$0.5 | \$2.5 |
| Total Cost (Including Govt. FTE): | \$32.7 | \$38.7 | \$44.8 | \$39.2 |
| Total Govt. FTE costs: | \$1.6 | \$2.6 | \$2.8 | \$2.3 |
| # of FTE rep by costs: | 1 | 4 | 4 | 4 |
| | | | | |
| Total change from prior year final President's Budget (\$) | | \$2.0 | \$2.2 | |
| Total change from prior year final President's Budget (%) | | 5.34% | 5.12% | |

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

The reason for the change from the FY2012 submission is that the FY2013 submission includes Government FTEs approved in JRCs for both WP2 and WP3. The FY2012 submission only included Government FTEs for WP3.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

| Contract Type | EVM Required | Contracting Agency ID | Procurement Instrument Identifier (PIID) | Indefinite Delivery Vehicle (IDV) Reference ID | IDV Agency ID | Solicitation ID | Ultimate Contract Value (\$M) | Type | PBSA ? | Effective Date | Actual or Expected End Date |
|---------------|--------------|-----------------------------------|--|--|---------------|-----------------|-------------------------------|------|--------|----------------|-----------------------------|
| Awarded | 6920 | DTFAWA-04-C-00045 | | | | | | | | | |
| Awarded | 6920 | DTFAWA-11-D-0006 | | | | | | | | | |

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

The Program Office conducts total program EVM (including prime and support contractors and FTEs) using formal EVM data where mandated by contract and informal data sources (invoices and personnel records) for all other information to assure that the total EVM shows the true program status. The process has been validated by an independent EVM review and TFM received a green rating. All work performed using Level-of-Effort (LOE) arrangements will be defined by Task Orders prior to the performance of any work by a contractor. These various contract types allow the government to provide an incentive to the contractor in critical cost intensive areas to meet project costs while meeting performance and schedule goals. Status reviews are conducted monthly to ensure progress against goals. Part of the overall strategy has always been separate individual statements of work into small manageable portions so that if a contractor does not perform, that contractor will be replaced, with minor impact to the CATMT effort. The support service contractors are currently LOE contracts/task orders. These are LOE contracts/tasks orders in support of the government activities required to complete the program. These support activities are LOE to allow for the greatest contract flexibility in adjusting contractor support skill types, for the least cost, as the NextGen CATMT program has evolved from development to implementation to maintenance. The FAA's EVM Implementation Guide allows for tailoring when required to meet the program needs.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-23

Section B: Project Execution Data

Table II.B.1 Projects

| Project ID | Project Name | Project Description | Project Start Date | Project Completion Date | Project Lifecycle Cost (\$M) |
|------------|--|---|--------------------|-------------------------|------------------------------|
| P | Pre-Release Planning | Initial planning for CATMT Projects. | | | |
| 6 | Release 6B Corridor Integrated Weather System (CIWS) | Place the Corridor Integrated Weather System (CIWS) on TFM Traffic Situation Display (TSD). | | | |
| 7 | Release 7 | Design, Develop, Test & Deploy Release 7. | | | |
| 8 | Release 8 | Design, Develop, Test & Deploy Release 8. | | | |
| 9 | Release 9 | Design, Develop, Test & Deploy Release 9. | | | |
| TRSR1 | TFM Remote Site Re-Engineering (TSR-R) Phase 1 | Design, Develop, Test & Deploy TRS-R Phase 1. | | | |
| TRSR2 | TFM Remote Site Re-Engineering Phase 2 | Design, Develop, Test & Deploy TRS-R Phase 2. | | | |

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

| Project ID | Name | Total Cost of Project Activities (\$M) | End Point Schedule Variance (in days) | End Point Schedule Variance (%) | Cost Variance (\$M) | Cost Variance (%) | Total Planned Cost (\$M) | Count of Activities |
|------------|------|--|---------------------------------------|---------------------------------|----------------------|-------------------|--------------------------|---------------------|
|------------|------|--|---------------------------------------|---------------------------------|----------------------|-------------------|--------------------------|---------------------|

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

| Project ID | Name | Total Cost of Project Activities (\$M) | End Point Schedule Variance (in days) | End Point Schedule Variance (%) | Cost Variance (\$M) | Cost Variance (%) | Total Planned Cost (\$M) | Count of Activities |
|------------|--|--|---------------------------------------|---------------------------------|----------------------|-------------------|--------------------------|---------------------|
| P | Pre-Release Planning | | | | | | | |
| 6 | Release 6B Corridor Integrated Weather System (CIWS) | | | | | | | |
| 7 | Release 7 | | | | | | | |
| 8 | Release 8 | | | | | | | |
| 9 | Release 9 | | | | | | | |
| TRSR1 | TFM Remote Site Re-Engineering (TSR-R) Phase 1 | | | | | | | |
| TRSR2 | TFM Remote Site Re-Engineering Phase 2 | | | | | | | |

Key Deliverables

| Project Name | Activity Name | Description | Planned Completion Date | Projected Completion Date | Actual Completion Date | Duration (in days) | Schedule Variance (in days) | Schedule Variance (%) |
|--------------|------------------------|--|-------------------------|---------------------------|------------------------|--------------------|------------------------------|-----------------------|
| 6 | Release 6B Test/Deploy | Conduct FAA William J. Hughes Technical Center (WJHTC) System Acceptance Test (WSAT), Operational Test and Evaluation (OT&E) and deploy capability | 2011-11-15 | 2011-11-15 | 2011-11-05 | 148 | 10 | 6.76% |
| 7 | Release 7 Test/Deploy | Conduct WSAT,OT&E and deploy capability | 2012-05-30 | 2012-05-30 | 2012-05-06 | 181 | 24 | 13.26% |

Section C: Operational Data

Table II.C.1 Performance Metrics

| Metric Description | Unit of Measure | FEA Performance Measurement Category Mapping | Measurement Condition | Baseline | Target for PY | Actual for PY | Target for CY | Reporting Frequency |
|--|-----------------|--|-----------------------|-----------|---------------|---------------|---------------|---------------------|
| Availability of the TFMS for conducting normal operations | Percentage | Technology - Reliability and Availability | Over target | 0.990000 | 0.990000 | 0.999800 | 0.990000 | Monthly |
| CPU Resource utilization on average during peak demand | Percentage | Technology - Effectiveness | Under target | 0.750000 | 0.750000 | 0.750000 | 0.750000 | Quarterly |
| Network Resource Utilization on average during peak demand | Percentage | Technology - Efficiency | Under target | 0.750000 | 0.750000 | 0.750000 | 0.750000 | Quarterly |
| Average time (hours) to close issue-based Trouble Tickets submitted to CSC's service desk | Number | Customer Results - Service Coverage | Under target | 40.000000 | 40.000000 | 38.110000 | 38.000000 | Monthly |
| Use of Arrival Uncertainty Management (AUM) during Severe Weather Avoidance Plan (SWAP) season increase over PY11 levels | Percentage | Customer Results - Customer Benefit | Over target | 1.000000 | 1.000000 | 1.000000 | 1.010000 | Semi-Annual |